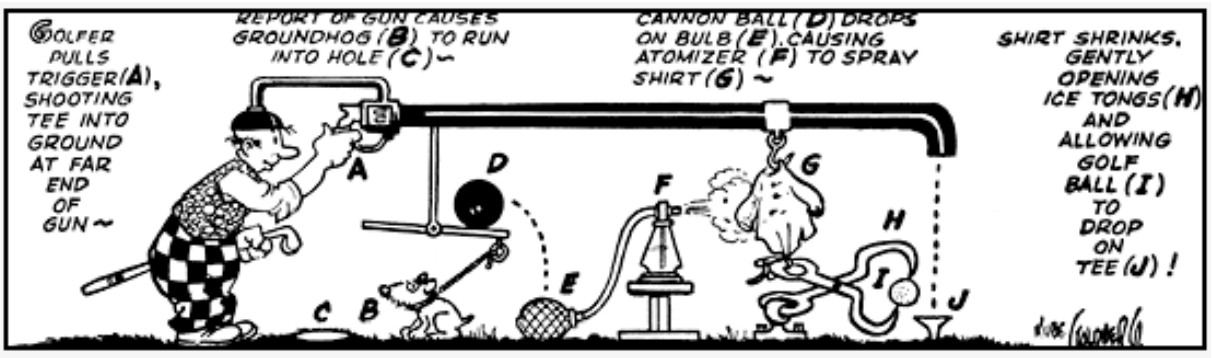
Science, Technology, & More!

Marking Period One — Rube Goldberg Project

"Rube Goldberg was a popular syndicated newspaper cartoonist best remembered for his crazy and involved pseudoscientific inventions for doing simple everyday tasks, like turning on the toaster or setting off a wake-up alarm. To demonstrate these absurd sequential inventions, Goldberg invented a cartoon character named Professor Lucifer Gorgonzola Butts. It was Butts' goal to make the simplest task as incredibly complicated as possible—and he always succeeded.

"The true inventor is undaunted by the often-heard words "It'll never work", no matter how many discouragements or failed experiments may occur. Most inventions didn't work the first time anyway, sometimes not until the tenth, twentieth, or even hundredth time around. The invention process is one of trial and error, and each trial will usually be an improvement, or at least a learning experience, over the previous experiment. Every attempt, successful or unsuccessful, can lead to new ideas and new inventions."

—Steven Caney, Invention Book, Workman Pub. Co., 1985



Your assignment is to build a Rube Goldberg Device that sounds an alarm, blows out a candle, or achieves some other goal approved by Mr. Cox. You may work alone or with one other person taking Mr. Cox's Science & Technology class. Your Device must incorporate all six types of simple machines into a compound machine that achieves your goal. It must be no larger than 75cm x 75cm x 75cm.

You must show a design for the Device on Monday, September 29.
You must present a progress report on Monday, October 6.
You must demonstrate the Device in class on Monday, October 13.

Your grade will be determined based on the rubric found on the back of this page. Here's a quick summary:

- Did you submit a plan, a progress report, and a project on time? (Your project must be delivered on time, even if you are absent from school, because we'll all be counting on you!)
- Does the Device use all six kinds of simple machines at least once?
- Did you label input and output distances, and the mechanical advantage?
- Is the Device unique and personal? (You can make it more interesting by using unique parts, increasing the number of steps, making the device work very slowly, connecting the parts so they branch off in all three dimensions, adding artistic touches, etc. You should also be able to construct the device with "junk-drawer" parts.)